

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

Alexandra, Virginia 22513-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,398	10/25/2001	Hans Pallingen	SCHSM-009XX	1040
207 7	7590 [1/20/2003		EXAMINER	
	EN, SCHURGIN, GA	ROSENBERGER, RICHARD A		
BOSTON, MA 02109			ART UNIT	PAPER NUMBER

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Application/Control Number: 10/002,398

Art Unit: 2877

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over
   Greer et al (US 5,591, 291) in view of Sick et al (US 4,200,397) and Bucknell et al
   (US 6,111,653).

Greer et al shows a device for measuring an object comprising a photoelectric sensor arrangement (108, 110, 112, 114) which measured light form an object being measured. The sensor includes at least 3 (and thus at least 2) "partial sensors" which are individually operable and addressable. As shown in figure 7, there are means (130) for selectively switching the partial sensors on or off line.

Greer et al shows arranging the sensors so that they measure different angular ranges of light form the surface, but does not show the use of circular or annular detectors arranges concentrically. Both Sick et al and Bucknell et al show that it is known in the art to measure light from a surface using concentric circular or annular detectors to detect different angular ranges of light. It would have been obvious to use such concentric annular detectors in an apparatus such as shown by Greer et al because this is a known alternative manner of detecting such light and will produce more reliable measurements due to the fact that the measurement are

Application/Control Number: 10/002,398

Art Unit: 2877

being made over a larger area rather than a small area, and thus will be less sensitive to small deviations in the direction or intensity of the reflected light.

Greer et al also does not show a measuring lens for directing the light from the surface to the sensor; Sick et al teaches using such a lens for this purpose; see lens 26 of that reference.

 Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 872-9306

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (703) 308-4804.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger 14 November 2003

> Richard A. Rosenberger Primary Examiner